



SEQUENCE LISTING

<110> Zauderer, Maurice
Evans, Elizabeth E.
Borrello, Melinda A.

<120> Gene Differentially Expressed in Breast and
Bladder Cancer, and Encoded Polypeptides

<130> 1821.0040001

<140> 09/824,787

<141> 2001-04-04

<150> 60/194,463

<151> 2000-04-04

<160> 147

<170> PatentIn Ver. 2.1

<210> 1

<211> 354

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (7)..(354)

<400>.1

gccgcg atg agc ggg gag ccg ggg cag acg tcc gta gcg ccc cct ccc	48
Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro	
1 5 10	
 gag gag gtc gag ccg ggc agt ggg gtc cgc atc gtg gtg gag tac tgt	96
Glu Glu Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys	
15 20 25 30	
 gaa ccc tgc ggc ttc gag gcg acc tac ctg gag ctg gcc agt gct gtg	144
Glu Pro Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val	
35 40 45	
 aag gag cag tat ccg ggc atc gag atc gag tgc cgc ctc ggg ggc aca	192
Lys Glu Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr	
50 55 60	
 ggt gcc ttt gag ata gag ata aat gga cag ctg gtg ttc tcc aag ctg	240
Gly Ala Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu	
65 70 75	
 gag aat ggg ggc ttt ccc tat gag aaa gat ctc att gag gcc atc cga	288
Glu Asn Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg	
80 85 90	
 aga gcc agt aat gga gaa acc cta gaa aag atc acc aac agc cgt cct	336
Arg Ala Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro	
95 100 105 110	
 ccc tgc gtc atc ctg tga	354
Pro Cys Val Ile Leu	

gms
C1

AH

115

<210> 2
<211> 115
<212> PRT
<213> Homo sapiens

<400> 2
Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu
1 5 10 15
Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro
20 25 30
Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu
35 40 45
Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala
50 55 60
Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn
65 70 75 80
Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala
85 90 95
Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys
100 105 110
Val Ile Leu
115

<210> 3
<211> 518
<212> DNA
<213> Homo sapiens

<400> 3
gggccgcgat gagcgtagcc ggggcagacg tccgtagcgc cccctcccga ggaggtcgag 60
ccgggcagtg ggggtccgcat cgtggtggag tactgtgaac cctgcggctt cgagggcgacc 120
tacctggagc tggccagtgc tgtgaaggag cagtatccgg gcatcgagat cgagtcgcgc 180
ctcgggggca caggtgcttt gagatagaga taaatggaca gctggtgttc tccaagctgg 240
agaatggggg ctttccttat gagaaagatc tcattgaggc catccgaaga gccagtaatg 300
gagaaaccct agaaaagatc accaacagcc gtcctccctg cgtcatcctg tgactgcaca 360
ggactctggg ttctctgctc gttctggggt ccaaaccctg gtctcccttt ggtcctgctg 420
ggagctcccc tgcctctttc acctacttag ctcccttagca aagagacact ggcctccact 480
ttgccctttg ggtacaaaga aggaatagaa gattccgt 518

<210> 4
<211> 621
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (14)..(15)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (24)..(24)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (28)..(28)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (31)..(31)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (33)..(33)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (491)..(491)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (535)..(535)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (557)..(557)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (565)..(565)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (574)..(574)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (588)..(588)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (595)..(595)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (606)..(606)

<223> n is any nucleotide of a, t, g or c

<400> 4

ggggcccgag cggnggccag cgantgangg nangccggga cagacgtccg tagcgccccc 60
tcccgaggag gtcgagccgg gcagtggggt ccgcatcgtg gtggagtact gtgaaccctg 120
cggcttcgag gctacctacc tggagctggc cagtgtctgt aaggagcagt atccggggcat 180
cgagatcgag tcgcgcctcg ggggcacagg tgctttgaga tagagataaa tggacagctg 240
gtgttctcca agctggagaa tgggggcttt ccctatgaga aagatctcat tgaggccatc 300
cgaagagcca gtaatggaga aaccctagaa aagatcacca acaagcccggt cctcccttgc 360
gtcatcctgt gacttgaca ggactctggg gttcctgctc tgttctgggg gtccaaacct 420
tggtctccct ttggtcctgc tgggaagctc ccctgcctc tttcccctaa ttagctctta 480
agcaaagaga ncttggcctc caatttgccc tttgggtaca aagaaggaat agaanatccg 540

tggccttggg gaagganaaa aaatntccat aaanttttca ggcaactnaa acccntttcca 600
ggtaantccc agaaaaccaa t 621

<210> 5
<211> 683
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (608)..(608)
<223> n is any nucleotide of a, t, g or c

<400> 5
gagccggggc agacgtccgt agcggccct cccgaggagg tcgagccggg cagtggggtc 60
cgcatcgttg tggagtactg tgaaccctgc ggcttcgagg cgacctacct ggagctggcc 120
agtgtctgta aggagcagta tccgggcctc gagatcgagt cgcgcctcgg gggcacaggc 180
gcctttgaga tagagataaa tggacagctg gtgttctcca agctggagaa tgggggcttt 240
ccctatgaga aagatctcat tgagcccatc cgaagagcca gtaatggaga aaccctagaa 300
aagatcacca acagccgtcc tccctgcgtc atcctgtgac tgcacaggac tctggggttc 360
tgctctgttc tgggggtccaa accttgggtc ccctttgggtc ctgctgggag ctccccctgc 420
ctctgtcccc tacttagctc cttagcaaag agaccctggc ctccactttg ccctttgggt 480
acaaagaagg aatagaagat tccgtggcct tgggggcagg agagagacac tctccatgaa 540
cacttctcca gccacctcat accccttcc cagggttaagt gcccacgaaa gcccagttca 600
ctcttcgnet cggtaatacc tgtctgatgc cacagatttt atttattctc ccctaaccga 660
gggcaatgtc agctattgcc agt 683

<210> 6
<211> 490
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (23)..(24)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (65)..(67)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (442)..(442)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (454)..(454)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (461)..(461)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (490)..(490)

<223> n is any nucleotide of a, t, g or c

<400> 6

gattcggcac gngggcnagg gannggggca gacgtccgta gcgccccctc ccgaggaggt 60
cgagnnnggc agtgggggtcc gcatcgtggt ggagtactgt gaaccctgcg gcttcgaggc 120
gacctacctg gagctggcca gtgctgtgaa ggagcagtat ccgggcatcg agatcgagtc 180
gcgcctcggg ggcacaggtg ttttgagata gagataaatg gacagctggt gttctccaag 240
ctggagaatg ggggctttcc ctatgagaaa gatctcattg aggccatccg aagaagccag 300
taatggagaa accctagaaa agatcaccaa caagcccgtc ctccctgcgt catcctgtga 360
ctgcacagga ctctgggttc ctgctctggt ctgggggtcca aaccttggtc tccctttggt 420
cctgctggga gntccccctg cctctttccc ctanttagct ncttagcaaa gagaccctgg 480
cctccacttn 490

<210> 7

<211> 557

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (28)..(28)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (504)..(504)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (527)..(527)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (545)..(545)

<223> n is any nucleotide of a, t, g or c

<400> 7

cgctccgtagc gccccctccc gaggaggncr gacccgggca gtgggggtccg catcgtggtg 60
gagtactgtg aaccctgcgg cttcgagggc acctacctgg agctggccag tgctgtgaag 120
gagcagtatc cgggcatcga gatcgagtcg cgcttcgggg gcacaggtgc tttgagatag 180
agataaatgg acagctgggtg ttctccaagc tggagaatgg gggctttccc tatgagaaaag 240
atctcattga ggccatccga agagccagta atggaagaaa ccctagaaaa gatcaccaac 300
agccgtcttc ccttgcgcta tctgtgact tgcaaggac tctgggttcc tgctctgttc 360
ttgggggtcca aacctttggt ctccctttgg tctgtctggg aagctcccc tgcccttttt 420
ccctacttta agctccttta gcaaagaaga acctgggcct tccacttttg ccctttttggg 480
gtacaaaaga aggaattaga aganttcctg gggcctttgg gggcaangaa gaagagaaac 540
tcttnccatt gaacaat 557

<210> 8

<211> 508

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (12)..(13)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (19)..(20)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (23)..(23)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (27)..(27)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (31)..(31)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (33)..(33)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (44)..(44)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (442)..(442)
<223> n is any nucleotide of a, t, g or c

<400> 8
ggccccgagcg gnngccagnn gantgangag nangccgggg cagncgtccg tagcgccccc 60
tcccgaggag gtcgagcccg gcagtgggt cgcctcgtg gtggagtact gtgaaccctg 120
cggcttcgag gcgacctacc tggagctggc cagtgtctg aaggagcagt atccgggcat 180
cgagatcgag tcgcgcctcg ggggcacagg tgcctttgag atagagataa atggacagct 240
ggtgttctcc aagctggaga atgggggctt tcctatgag aaagatctca ttgaggccat 300
ccgaagagcc agtaatggag aaaccctaga aaagatcacc aacagccgtc ctccctgcgt 360
catcctgtga ctgcacagga ctctgggttc ctctctgtt ctgggggtcca aaccttggtc 420
tccctttggt cctgctggga gntccccctg gctcttttcc cctacttaag ctccttaagc 480
aaagaagacc ctggcctcca attttggt 508

<210> 9
<211> 418
<212> DNA
<213> Homo sapiens

<400> 9
cgtccgtage gccccctccc gaggaggtcg agccgggagc tgggggtccgc atcgtggtgg 60
agtactgtga accctgcggc ttcgaggcga cctacctgga gctggccagt gctgtgaagg 120
agcagtatcc gggcatcgag atcgagtcgc gcctcggggg cacaggtgcc tttgagatag 180
agataaatgg acagctggtg ttctccaagc tggagaatgg gggctttccc tatgagaaag 240

atctcattga ggccatccga agagccagta atggagaaac cctagaaaag atcaccaaca 300
gccgtcctcc ctgcgtcatc ctgtgactgc acaggactct gggttcctgc tctgttctgg 360
ggtccaacct tgggtctccct ttgggtcctgc tgggagctcc cctgcctctt tccctact 418

<210> 10
<211> 411
<212> DNA
<213> Homo sapiens

<400> 10
cgcacgtg tggagtactg tgaaccctgc ggcttcgagg cgacctacct ggagctggcc 60
agtgtctgta aggagcagta tccgggcatc gagatcgagt cgcgcctcgg gggcacaggt 120
gctttgagat agagataaat ggacagctgg tgttctccaa gctggagaat gggggctttc 180
cctatgagaa agatctcatt gaggccatcc gaagagccag taatggagaa accctagaaa 240
agatcaccaa cagccgtcct cctgcgtca tcctgtgact gcacaggact ctgggttcct 300
gctctgttct ggggtccaaa cdttggtctc cctttggtcc tgctggggag cccccctgc 360
ctctttcccc tacttagctc cttagcaaaag agacctgggc ctccattttg c 411

<210> 11
<211> 397
<212> DNA
<213> Homo sapiens

<400> 11
tcgagccggg cagtggggtc cgcacgtg tggagtactg tgaaccctgc ggcttcgagg 60
cgacctacct ggagctggcc agtgtctgta aggagcagta tccgggcatc gagatcgagt 120
cgcgcctcgg gggcacaggt gcctttgaga tagagataaa tggacagctg gtgttctcca 180
agctggagaa tgggggcttt ccctatgaga aagatctcat tgaggccatc cgaagagcca 240
gtaatggaga aaccctagaa aagatcacca acagccgtcc tccctgcgtc atcctgtgac 300
tgacacaggac tctgggttcc tgctctgttc tggggtccaa accttggtct ccctttggtc 360
ctgctgggag ctccccctgc ctctttcccc tacttag 397

<210> 12
<211> 389
<212> DNA
<213> Homo sapiens

<400> 12
ggcagacgtc cgtagcgccc cctcccagag aggtcgagcc gggcagtggt gtccgcacatc 60
tgggtggagta ctgtgaaccc tgcggcttcg aggcgacct cctggagctg gccagtgtctg 120
tgaaggagca gtatccgggc atcgagatcg agtcgcgcct cgggggcaca ggtgcctttg 180
agatagagat aaatggacag ctggtgttct ccaagctgga gaatgggggc ttccctatga 240
gaaagatctc attgaggcca tccgaagagc cagtaatgga gaaaccctag aaaagatcac 300
caacagccgt cctccctgct tcctcctgtg actgcacagg actctgggtt cctgctctgt 360
tctggggtcc aaaccttggt ctccctttg 389

<210> 13
<211> 469
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (407)..(407)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature

<222> (416)..(416)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (427)..(427)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (446)..(446)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (461)..(461)
<223> n is any nucleotide of a, t, g or c

<400> 13
ccggagcaga cgtccgtagc gccccctccc gaggaggtcg agccgggcag tgggggtccgc 60
atcgtggttg agtactgtga accctgcggc ttcgaggcga cctacctgga gctggccagt 120
gctgtgaagg agcagtatcc gggcatcgag atcgagtcgc gcctcggggg cacagggtgcc 180
tttgagatag agataaatgg acagctgggtg ttctccaagc tggagaatgg gggctttccc 240
tatgagaaag atctcattga ggcctatccga agagccagta atggagaaac cctagaaaaa 300
atcaccaaca gccgtcctcc ctgcgtcatc ctgttgactt gcacaggact ttgggttcct 360
gctctgttct tgggggtccaa acctttggtc ttcccttttg ttctgnttg gggagntccc 420
ccttgcnttt ttcccttatt taggtncctt agcaaagaga ncttggtt 469

<210> 14
<211> 608
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (15)..(16)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (26)..(26)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (31)..(31)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (34)..(34)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (523)..(523)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (525)..(525)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (597)..(597)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (599)..(599)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (605)..(605)

<223> n is any nucleotide of a, t, g or c

<400> 14

caggggccga gcggnngcca ggcacngacg ngangccggg gcagacgtcc gttagcgcgcc 60
ctcccaggga ggtcgagccg gccagtgagg tccgcacgtg ggtggagtag tgtgaaccct 120
gcggcttcga ggcgacctac ctggagctgg ccagtgtctg gaaggagcag tatccgggca 180
tcgagatcga gtcgcgcctc gggggcacag gtgcctttga gatagagata aatggacagc 240
tggtgttctc caagctggag aatgggggct tccctatga gaaagatctc attgaggcca 300
tccgaagagc caagtaatgg agaaacccta gaaaagatca ccaacaagcc cgtcctccct 360
gcgtcatcct gtgactgcac agggactctg ggttctgct ctcccggatc tgtctccttc 420
ctctagccag cagtatggac agctggaccc cctgaaactt tcctctcctc ttaactgggc 480
agagtgttgt ctctcccaa atttattaaa actaaaaatg gantncattc ctctgaaagc 540
aaaacaaatt cataattggg tgatattaat agagagggtt ttcggaagca gatttgntna 600
tatgnaat 608

<210> 15

<211> 411

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (3)..(3)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (9)..(9)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (13)..(13)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (18)..(21)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (23)..(23)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature
<222> (63)..(63)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (365)..(365)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (382)..(382)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (408)..(408)
<223> n is any nucleotide of a, t, g or c

<400> 15
ggncgccgnc gantgagnnn nangccgggg cagacgtccg tagcgccccc tcccgaggag 60
ttngagccgg gcagtggggt ccgcatcgtg gtggagtact gtgaaccctg cggcttcgag 120
gcgacctacc tggagctggc cagtgtctgt aaggagcagt atccgggcat cgagatcgag 180
tcgcgcctcg ggggcacagg tgcttttgag atagagataa atggacagct ggtgttctcc 240
aagctggaga atgggggctt tccctatgag aaagatctca ttgaggccat ccgaagagcc 300
agtaatggag aaaccctaga aaagatcacc aacagccgtt cctccctgcg tcatcctgtg 360
actgncacag gactctgggt tncctgctct gtttctgggg tccaaacntt g 411

<210> 16
<211> 420
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (33)..(33)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (386)..(386)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (412)..(412)
<223> n is any nucleotide of a, t, g or c

<400> 16
gcgcgnattg agcgtangcc ggggcagacg tcngtagcgc cccctcccga ggagttcgag 60
ccacgcagtg gggtcgcgat cgtggtggag tactgtgaac cctgcggctt cgaggcgacc 120

tacctggagc tggcagtgct tgtgaaggag cagtatccgg gcatcgagat cgagtcgagc 180
ctcgggggca caggtgcttt gagatagaga taaatggaca gctggtgttc tccaagctgg 240
agaatggggg ctttcctat gagaaagatc tcattgaggc catccgaaga gccagtaatg 300
gagaaaccct agaagagatc accaacagcc gtcctccctg gcgttcatcc tgtggactgg 360
cacaggactt ctgggtttcc tgctcnggtt tctgggggtc caaaccttg tntcccttt 420

<210> 17
<211> 447
<212> DNA
<213> Homo sapiens

gm
C1

<220>
<221> misc_feature
<222> (8)..(8)
<223> n is any nucleotide of a, t, g or c

AI

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (20)..(20)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (48)..(48)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (253)..(253)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (357)..(357)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (409)..(409)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (415)..(415)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (420)..(420)
<223> n is any nucleotide of a, t, g or c

<220>
 <221> misc_feature
 <222> (431)..(431)
 <223> n is any nucleotide of a, t, g or c

<220>
 <221> misc_feature
 <222> (441)..(441)
 <223> n is any nucleotide of a, t, g or c

<400> 17
 gcggcggncc nccatgaggn gnagccgggg cagacgtccg tagcgccncc tcccaggagg 60
 gtcgagccgg gcagtggggt ccgcatcgtg gtggagtact gtgaaccctg cggcttcgag 120
 gcgacctacc tggagctggc cagtgtctgt aaggagcagt atccgggcat cgagatcgag 180
 tcgcgctcgc ggggcacagg tgcctttgag atagagataa atggacagct ggtgttctcc 240
 aagctggaga atnggggctt tccctatgag aaagatctca ttgaggccat ccgaagagcc 300
 agtaatggag aaacctaga aaagatcacc aacagccgtc ctccctgcgt catcctntga 360
 ctgcacagga cttttgggtt tctgtctctg tttctggggg ttccaaacnt tggntntccn 420
 tttgtccctg nttgggagct nccccctt 447

<210> 18
 <211> 326
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (16)..(16)
 <223> n is any nucleotide of a, t, g or c

<400> 18
 gcgaccggat gggagnagcc ggggcagacg tccgtagcgc cccctcccga ggaggtcgag 60
 ccgggcagtg gggtcgcgat cgtgggtggag tactgtgaac cctgcggctt cgaggcgacc 120
 tacctggagc tggccagtgc tgtgaaggag cagtatccgg gcacgcagat cgagtcgcgc 180
 ctccggggca caggtgcttt gagatagaga taaatggaca gctggtgttc tccaagctgg 240
 agaatggggg ctttccctat gagaaagatc tcattgaggc catccgaaga gccagtaatg 300
 gagaaaccct agaaaagatc accaac 326

<210> 19
 <211> 584
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> n is any nucleotide of a, t, g or c

<400> 19
 tagcgcnngc ggggagccgg ggcagacgtc cgtagcgccc cctcccaggg aggtcgagcc 60
 gggcagtggt gtccgcacat tgggtggagta ctgtgaaccc tgcggcttcg aggcgacct 120
 cctggagctg gccagtgtct tgaaggagca gtatccgggc atcgagatcg agtcgcgcct 180
 cgggggcaca ggtgcctttg agatagagat aatggacag ctggtgttct ccaagctgga 240
 gaatgggggc tttccctatg agaaagatct cattgaggcc atccgaagag ccagtaatgg 300
 agaaacccta gaaaagatca ccaacagccg tctccctgc gtcacctgt gactgcacag 360
 gactctgggt tctgtctctg ttctggggtc caaaccttgg tctccctttg gtctgtctgg 420
 gagctccccc tgctcttttc ccctacttag ctcttagca aagagaccct ggccctccact 480
 ttgccctttg ggtacaaaga aggaatagaa gatccgtgg ccttgggggc aggagagaga 540
 cactctccat gaacacttct ccagccacct catccccct tccc 584

<210> 20
<211> 488
<212> DNA
<213> Homo sapiens

<400> 20
cacgaggcga gcgagagccgg ccgcgatgag cggggagccg gggcagacgt ccgtagcgcc 60
ccctcccagag gaggtcgagc cgggcagtggt ggtccgcacg gtggtggagt actgtgaacc 120
ctgcggcttc gaggcgacct acctggagct ggccagtgtc gtgaaggagc agtatccggg 180
catcgagatc tactcgcgcc tcgggggcac aggtgccttt gagatagaga taaatggaca 240
gctggtgttc tccaagctgg agaattggggg ctttccttat gagaaagatc tcattgaggc 300
catccgaaga gccagtaatg gagaaacctt agaaaagatc accaacagcc gtcctccctg 360
cgtcatctcg tgactgcaca ggactctggg ttcctgctct gttctggggg ccaaaccttg 420
gtctcccttt ggtcctgctg ggagctcccc ctgcctcttt ccctactta gtccttagc 480
aaagagac

<210> 21
<211> 420
<212> DNA
<213> Homo sapiens

<400> 21
cacgagggcg cccctcccg aggaggtcga gccgggcagt ggggtccgca tcgtggtgga 60
gtactgtgaa ccctgcggt tcgaggcgac ctacctggag ctggccagtg ctgtgaagga 120
gcagtatccg ggcacgcaga tcgagtcgag cctcgggggc acaggtgcct ttgagataga 180
gataaatgga cagctggtgt tctccaagct ggagaatggg ggctttccct atgagaaaaga 240
tctcattgag gccatccgaa gagccagtaa tggagaaacc ctagaaaaga tcaccaacag 300
ccgtcctccc tgcgtcatcc tgtgactgca caggactctg ggttctctg ctgttctggg 360
gtccaaacct tgggtctcct ttggtctcgc tgggagctcc ccctgcctct tccccctact 420

<210> 22
<211> 429
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (43)..(43)
<223> n is any nucleotide of a, t, g or c

<400> 22
tgggtaattg gattctcacc cctccgcctt acccactgca ctncgactct tagagatccc 60
cggacgagcc gcagtcagac gtccgtagcg cccctcccg aggaggttta gccgggcagt 120
ggggtccgca tcgtggtgga gtactgtgaa ccctgcggct tcgaggcgac ctacctggag 180
ctggccagtg ctgtgaagga gcagtatccg ggcacgcaga tcgagtcgag cctcgggggc 240
acaggtgcct ttgagataga gataaatgga cagctggtgt tctccaagct ggagaatggg 300
ggctttccct atgagaaaaga tctcattgag gccatccgaa gagccagtaa tggagaaacc 360
ctagaaaaga tcaccaacag ccgtcctccc tgcgtcatcc tgtgactgca caggactctg 420
ggttctcgc

<210> 23
<211> 343
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (18)..(18)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (23)..(23)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (28)..(29)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (33)..(33)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (304)..(304)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (327)..(327)
<223> n is any nucleotide of a, t, g or c

<400> 23
gggcccgagc ggnccgcngc gantgagng tangccgggg cagacgtccg tagcgccccc 60
tcccgaggag tccgagccgg cagtgggggtc cgcacgtgg tggagtactg tgaacctgc 120
ggcttcgagg cgacctacct ggagctggcc agtgctgtga aggagcagta tccgggcatc 180
gagatcgagt cgcgcctcgg gggacaggt gctttgagat agagataaat ggacagctgg 240
tgttctccaa gctggagaat gggggctttc cctatgagaa agatctcatt gaggccatcc 300
gaanagccag taatggagaa accctanaaa agatcaccaa cag 343

<210> 24
<211> 436
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (16)..(16)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (19)..(19)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (28)..(28)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (30)..(30)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (45)..(47)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (68)..(68)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (77)..(77)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (389)..(389)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (436)..(436)

<223> n is any nucleotide of a, t, g or c

<400> 24

atttcggcac agggcncgna ttgagcgnan gccggggcag acgtnnntag cgccccctcc 60
cgaggagntc gagccgncda gtgggggtccg catcgtggtg gactactgtg aaccctgcgg 120
cttcgaggcg acctacctgg agctggccag tgctgtgaag gagcagtatc cgggcatcga 180
gatcgagtcg cgctcggggc gcacaggtgc ttttgagata gagataaatg gacagctggt 240
gttttccaag ctggagaatg ggggctttcc ctatgagaaa gatctcattg aggccatccg 300
aagagccagt aatggagaaa ccctagaaaa gatcaccaac agccgtcctc cctgcgtcat 360
cctgtggact gcacaggaac tctgggttnc ctgtcttctg tttctggggg tccaaacctt 420
ggttttccct ttggtg 436

<210> 25

<211> 323

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (121)..(121)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (229)..(229)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (319)..(319)

<223> n is any nucleotide of a, t, g or c

<400> 25

ccgaggcaga cgtccgtagc gccccctccc gaggaggtcg agccgggcag tgggggtccgc 60
atcgtggtgg agtactgtga accctgcggc ttcgagccga cctacctgga gctggccagt 120
nctgtgaagg agcagtatcc gggcatcgag atcgagtcgc gcctcggggg cacaggtgcc 180

tttgagatag agataaatgg acagctgggtg ttctccaagc tggagaatng gggctttccc 240
tatgagaaag atctcattga ggccatccga agagccagta atggagaaac cctagaaaag 300
atcaccaaca gccgtcctnc ctg 323

<210> 26
<211> 389
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (4)..(4)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (55)..(55)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (365)..(365)
<223> n is any nucleotide of a, t, g or c

<400> 26
gccnggagca gacgtccgta ggcgccccctc ccgaggaggt cgagccgggc agtcnggggtc 60
cgcatcgtgg tggagtaactg tgaaccctgc ggcttcgagg cgacctacct ggagctggcc 120
agtgtctgtga aggagcagta tccgggcata gagatcgagt cgcgcctcgg gggcacaggt 180
gcctttgaga tagagataaa tggacagctg gtgtttctca agctggagaa tgggggcttt 240
ccctatgaga aagatctcat tgaggccatc cgaagagcca gtaatggaga aaccctagaa 300
aagatcacca acagccgtct tccctgogtt catcctgttg actgcacagg acttctgggt 360
tctngttct gttcttggga ttccaaact 389

<210> 27
<211> 460
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (3)..(3)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (337)..(337)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (402)..(402)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (418)..(418)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature

<222> (428)..(428)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (430)..(430)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (436)..(436)
<223> n is any nucleotide of a, t, g or c

<400> 27
agntcgagcc gggcagtgcc gtccgcatcg tggaggagta ctgtgaaccc tgcggcttcg 60
aggcgaccta cctggagctg gccagtgctg tgaaggagca gtatccgggc atcgagatcg 120
agtcgcgcct cgggggcaca ggtgcttttg agatagagat aaatggacag ctggtgttct 180
ccaagctgga gaatgggggc ttccctatg agaaagatct cattgaggcc atccgaagag 240
ccagtaatgg agaaacccta gaaaagatca ccaacagccg tcctccctgc gtcacccctg 300
gactgcacag gactctgggg tctgcttct ggttctnngg gtccaaaact tgggtcttcc 360
ttttgggcct gcttgggact tcccccctggc tcnttttccc caatttagct cccttagnca 420
aaaagaanct tgggcttcan atttgnccct ttgggaaaaag 460

<210> 28
<211> 436
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (278)..(278)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (376)..(376)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (405)..(405)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (417)..(417)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (434)..(434)
<223> n is any nucleotide of a, t, g or c

<400> 28
aagaaagtga accctgcggc ttccgagggca cctacctgga gctggccagt gctgtgaagc 60
agcagtatcc gggcatcgag atcgagtgcg gctcgggggg cacaggtgct ttgagataga 120
gataaatgga cagctgggtg ttcccaagct ggagaatggg ggttttccct atgagaaaaga 180
tctcattgag gccatccgaa gagccagtaa tggagaaacc ctagaaaaga tcaccaacag 240
ccgtccctccc tgcgtcatcc tgtgactgca caggactnac tctgggttcc tgctctgttc 300
tggggtccaa accttgggtc tcaatttggg cctgctggga agctcccctt gcctcttttc 360
ccctacttaa gctcctaag caaaagagaa ccttgggcct ccaantttgg cccttnggt 420

acaaaaagaa aggnat

<210> 29
<211> 391
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (7)..(7)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (22)..(22)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (24)..(24)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (209)..(209)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (254)..(254)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (309)..(309)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (354)..(354)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (364)..(364)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (369)..(369)
<223> n is any nucleotide of a, t, g or c

<400> 29
cggcacnccg ggattgaggt gnangccggg gcagacgtcc ctacgcggcc ctcccaggga 60
gttcgagccg ggcagtgagg tccgcacgtt ggtggagtac tctgaaccct gcggcttcga 120
ggcgacctac ctggagctgg ccagtgctgt gaaggagcag tatccgggca tcgagatcga 180
gtcgcgcctc gggggcacag gtgcttttna gatagagata aatggacagc tgggtgttctc 240
caagctggag aatnggggct tccctatga gaaagatctt cattgaggcc atccgaagag 300
ccagtaatng agaaacccta gaaaagatca ccaacagccg tccttccttg cgtncatcct 360
gttnacttnc acaaggattc ttgggtttcc t 391

<220>
<221> misc_feature
<222> (10)..(10)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (225)..(225)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (230)..(230)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (289)..(289)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (293)..(293)
<223> n is any nucleotide of a, t, g or c

<400> 34
gcgagagcgc cgcgatgag cggcgagccg gggcagacgt ccgtagcgcc ccctcccag 60
gaggtcgagc cgggcagtcg ggtccgcatc gtggtggagt actgtgaacc ctgcggcttc 120
gaggcgacct acctggagct ggccatgctg tgaaggagca gtatccgggc atcgagatcg 180
agtgcgcct cgggggcaca ggtgcctttg agatagagat aaatngacan ctggtgttct 240
tcaagctgga gaatgggggc tttccctatg agaaagatct cattgaggnc atnogaagag 300
ccataatgg 309

<210> 35
<211> 571
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (393)..(393)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (482)..(482)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (503)..(503)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (520)..(520)
<223> n is any nucleotide of a, t, g or c

<400> 35
agtgtttgta ggcgcacttt actgccaata gctgacattg ccctggggtta ggggagaata 60
aataaaatct gtggcatcag acagggtatta ccgaggcgaa gagtggactg ggctttcgtg 120

ggcacttacc ctgggaaggg ggtatgaggt tggctggaga agtggttcatt gagagtgtct 180
ctctcctgcc cccaaggcca cgggaatcttc tattccttct ttgtacccaa agggcaaagt 240
ggaggccagg gtctcttttc taaggagcta agtaggggaa agaggcagg ggagctccca 300
gcaggaccaa agggagacca aggtttggac ccagaaacag agcaggaaac cagagtcctg 360
tgcagtcaca ggatgacgca gggaggacgg ctnttggtga tcttttctag ggtttctcca 420
ttactggctc ttccgatggc ctcaatgaga tctttctcag gggaaagccc cattctccag 480
cntggagaac accagctgtc canttatctc tatctcaaan gcacctgtgc cccgaagcgc 540
gactcgattt tcgatgccc gatactgtc c 571

<210> 36
<211> 263
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (17)..(17)
<223> n is any nucleotide of a, t, g or c

<400> 36
ggggcagacg tccgtanccg ccctcccgaggaggtcgag ccgggcagtg gggctccgcat 60
cgtgggtggag tactgtgaac cctgcggctt cgaggcgacc tacctggagc tggccagtg 120
tgtgaaggag cagtatccgg gcatcgagat cgagtcgcgc ctccgggggca caggtgcttt 180
gagatagaga taaatggaca gctgggtgtc tccaagctgg agaattgggg ctttccctg 240
agaaagatct catttaggcc cat 263

<210> 37
<211> 528
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(1)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (299)..(299)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (387)..(387)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (520)..(520)
<223> n is any nucleotide of a, t, g or c

<400> 37
nttttttagtg tttgtagcgc cactttactg ccaatagctg acattgccct gggttagggg 60
agaataaata aaatctgttg catcagacag gtattaccga ggcgaagagt ggactgggct 120
ttcgtgggca cttaccctgg gaagggggta tgagggtggc ggagaagtgt tcatggagag 180
tgtctctctc ctgcccccaa ggccacggaa tcttctatct cttctttgta cccaaagggc 240
aaagtggagg ccagggtctc ttgtctaagg agctaagtag gggaaagagg caggggganc 300
tcccagcagg accaaaggga gaccaaggtt tggaccccag aacagagcag gaaccagag 360
tccttgtgca gtcacaggat gacgcangga ggacggctgt ttgtgatctt ttctaggggt 420
tctccattac tggctcttcg gatggcctca atgagatctt tctcataggg aaagccccc 480

ttctccagct tggagaacac cagctgtcca attatctccn tctcaaaa

52:

<210> 38
<211> 290
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (11)..(11)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (29)..(29)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (158)..(158)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (188)..(188)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (254)..(254)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (270)..(270)
<223> n is any nucleotide of a, t, g or c

<400> 38
cccgagcggg nccggccggc tgagcgagng agccggggca gacgtccgta gcgccccctc 60
ccgaggaggt cgagccgggc agtgggggtcc gcatcggtgt ggagtactgt aaaccctgcg 120
gcttcgaggc gacctacctg gagctggcca gtgctgtnaa ggagcagtat ccgggcatcg 180
agatcgantc gcgcctcggg ggcacaggtg cctttaagat agagataaat ggacagctgg 240
tgttctccaa gctngagaat ggggctttt cctatgagaa agatctcatt 290

<210> 39
<211> 320
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (101)..(101)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (113)..(113)
<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature
<222> (172)..(172)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (256)..(256)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (285)..(285)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (292)..(292)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (297)..(297)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (308)..(308)
<223> n is any nucleotide of a, t, g or c

<400> 39
ggtggagtagc tgtgaacctt gcggttcga ggcgacctac ctggagctgg ccagtgtgtg 60
gaaggagcag tatccgggca tcgagatcga gtcgcgcctc nggggcacag gtnctttgag 120
atagagataa atggacagct ggtgttctcc aagctggaga atgggggctt tncctatgag 130
aaagatctca ttgaggccat ccgaagagcc agtaatggag aaacctagaa aagttcacca 240
acagccgtcc ttctnctgc attctattga ctgcacagga ttctnggtt ontgctntgt 300
ttttgggntc caaacctttg 320

<210> 40
<211> 321
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (154)..(154)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (258)..(258)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (267)..(267)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (275)..(275)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (282)..(282)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (310)..(310)
<223> n is any nucleotide of a, t, g or c

<400> 40
ggagcagtat ccgggcatcg agatcgagtc gcgcctcggg ggcacagggtg ctttgagata 60
gagataaatg gacagctggg ttctccaag ctggagaatg ggggctttcc ctatgagaaa 120
gatctcattg agggcatccg aagagccagt aatnggagaa accctagaaa agatcaccaa 180
cagccgtcct acctgcgtca tctgtgact gcacaggact ctgggttcct gctctgttct 240
gggggtccaa acctgggncct tctttinggt ccctnttggg angttccct tgcttttttt 300
ccctaattan gttcctagga a 321

<210> 41
<211> 456
<212> DNA
<213> Homo sapiens

<400> 41
gcggggagcg gggcagacgt ccgtagcgcc ccctcccag gaggtcgagc tgctgcagtg 60
gggtccgcat cgtggtggag tactgtgaac cctgcggctt cgaggcgacc tacctggagc 120
tggccagtgc tgtgaaggag cagtatccgg gcatcgagat cgagtcgcgc ctcgggggac 180
aggtgctttg agatagagat aaatggacag ctggtgttct ccaagctgga gaatgggggc 240
ttccctatga gaaagatgtg agtatttaca gcgttgggag gacctcttgg tcacctacc 300
ccaacagtgc atcatcctgt cattccactc ctctagctca ttgaggccat ccgaagagcc 360
agtaatggag aaaccctaga aaagatcacc aacagccgtc ctccctgcgt catcctgtga 420
gtgcacagac tctgggttct gctctgttct gggggtc 456

<210> 42
<211> 458
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (63)..(63)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (69)..(69)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (316)..(316)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (348)..(348)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature

<222> (368)..(368)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (425)..(425)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (452)..(452)
<223> n is any nucleotide of a, t, g or c

<400> 42
ccaatagctg acattgccctt gggttagggg agaataaata aaatctgttg catcagacag 60
gtnttaccna ggcgaagagt ggaactgggt ttcgtgggca cttacccttg gaagggggta 120
tgaggtggct ggagaagttt tcatggagag tgtctctctc ctgcccccaa ggccacggaa 180
tcttctattc cttctttgta cccaaagggc aaagtggagg ccagggtctc tttgctaagg 240
agctaagtag gggaaagagg caggggggag tcccagcagg accaaaggga gaccaagggt 300
tggaccccag aacagngcag caaccagag tctgtgtcag tcacaggntg acgcagggag 360
gacggctntt tggatgattt tctagggtt tctccttact ggctcttcgg atggcctcaa 420
tgagnttttc tcatagggaa agcccccttt tncagttt 480

<210> 43
<211> 452
<212> DNA
<213> Homo sapiens

<400> 43
ttgtgtttgt agcgccactt tactgccaat agctgacatt gccctggggt aggggagaat 60
aaataaaatc tgtggcatca gacaggtatt accgaggcga agagtggact gggctttcgt 120
gggcacttac cctgggaagg gggatggagg tggctggaga agtgttcatt gagagtgtct 180
ctctctgccc cccaaggcca cggaatcttc tattccttct ttgtacccaa agggcaaaagt 240
ggaggccagg gtctctttgc caaggagcta agtaggggaa agaggcaggg ggagctccca 300
gcaggaccaa agggagacca aggtttggac ccagaacag aacaggaccc cagagtctgt 360
tgcagtcaca ggatgacgca gggaggacgg ctggttggtga tcttttctag ggtttctcca 420
ttactggctc ttcggtatggc tccaatgagc ta 480

<210> 44
<211> 444
<212> DNA
<213> Homo sapiens

<400> 44
agtgtttgta ggcgccacttt actgccaaata gctgacattg ccctggggtta ggggagaata 60
aataaaatct gtggcatcag acaggtatta ccgaggcgaa gagtggactg ggctttcgtg 120
ggcacttaccc ctgggaaggg ggtatgaggt ggttggagaa gtgttcattg agagtgtctc 180
tctcctgccc ccaaggccac ggaatcttct attccttctt tgtacccaaa gggcaaaagt 240
gaggccaggg tctctttgct aaggagctaa gtacgggaaa gaggcagggg gagctcccag 300
caggaccaaa gggagaccaa ggtttggacc ccagaacaga gcaggaaacc agagtctctg 360
gcagtcacag gatgacgcag gaggagacgg tgttggtgat cttttcttag gtttctccat 420
tactggctct tcggatggcc tcaaa 480

<210> 45
<211> 232
<212> DNA
<213> Homo sapiens

<220>

<221> misc_feature
<222> (13)..(13)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (23)..(23)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (147)..(147)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (182)..(182)
<223> n is any nucleotide of a, t, g or c

<400> 45
ggagcggcc gcnatgagcg gngagccgg ggcagacgtc cgtagcgcgc cctcccgagg 60
aggcgcagcc gggcagtggt gtcgcgcatcg tggcgagta cgtgaaaccc tgcggcttcg 120
aggcgaccta cctggagctg ggcagtnctg tgaaggagca gtatccgggc atcgagatcg 180
antcgcgcct cgggggcaca ggtgccttta agatagagat aaatggacag ct 232

<210> 46
<211> 456
<212> DNA
<213> Homo sapiens

<400> 46
ttttttttta gtgtttgtag cgccacttta ctgccaatag ctgacattgc cctgggttag 60
gggagaataa ataaaatctg tggcatcaga cagggtattac cgaggcgaag agtggactgg 120
gctttcgtgg gcacttaccc tgggaagggt gtatgagggt cctggagaag tgttcattga 180
gagtgtctct ctctgcccc caaggccacg gaattctcta ttccttcttt gtacccaaag 240
ggcaaagtgg aggccagggt ctctttgcta aggagctaag taggggaaag aggcaggggg 300
agctcccagc aggaccaaag ggagaccaag gtttgacccc cagaacagag caggaaccca 360
gagtcctgtg cagtcacag atgacgcagg gaggacggct gttggtgatc ttttctaggg 420
tttctccatt actggctctt cggatggctc aatgag 456

<210> 47
<211> 556
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (430)..(430)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (478)..(478)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (527)..(527)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (535)..(535)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (543)..(543)
<223> n is any nucleotide of a, t, g or c

ms
CI
A

<400> 47
gtatgcattt tatgcctcaa taaaaagttt agggaaaaaa acctcttatt cttgtacaga 60
atccatgggt gttctctata tggaaacagt agtaaaagttc tgggagtcct aagatctaaa 120
aaaagaaatc taaccatcca acaccaccta aagccatcac tcagatggag gggccatcac 180
gaaaggatac ttttggaggt ggtctgcaaa gaaaaaactt ctagaaaaag acaacaaaat 240
cgccagggtg tgggtggctca cgctgtaat ccagcgcctt tgggaggccg aggcgggcag 300
atcacgaggt caagagttcg accaccagcct gaccaacata gggaaaccc tgggtctccac 360
ttaaaaatta caaaaaatta actggggcgt ggttggccgc gcacctggta atcccagcta 420
cttttgggan ggcttggggg caggaagaat cgctttgaac ctgggaaggt tggaggttgc 480
agttgaancc gaggttcgca ccactgcatt tccagccttg ggggaanagg gcganactcc 540
gtntccaaaa aataat 556

<210> 48
<211> 461
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (6)..(6)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (371)..(371)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (393)..(393)
<223> n is any nucleotide of a, t, g or c

<400> 48
tttagngttt gtagcgccac tttactgcca atagctgaca ttgccctggg ttaggggaga 60
ataaataaaaa tctgtggcat cagacaggta ttaccgaggc gaagagtgga ctgggctttc 120
gtgggcactt accctgggaa ggggtatgag gtggctggag aagtgttcat ggagagtgtc 180
tctctcctgc ccccaaggcc acggaatctt ctattccttc tttgtaccca aaggcaaaat 240
ggaggccagg gtctctttgc taaggagcta agtaggggaa aaaggcaggg ggagctccca 300
gcaggaccaa agggagacca aggtttggac ccagaaacag agcaggaacc cagagtcctg 360
tgcagtccca ngatgacgca gggaggacgg ctnttgggtg tcttttctag ggtttctcca 420
ttacttgctc ttcggatggc ctcaatgaga tttttctcat a 461

<210> 49
<211> 434
<212> DNA
<213> Homo sapiens

<400> 49
gtttgtagcg ccactttact gccaatagct gacattgcc tgggttaggg gagaataaat 60
aaaatctgtg gcatcagaca ggtattaccg aggcgaagag tggactgggc tttcgtgggc 120

acttaccctg ggaagggggt atgaggtggc tggagaagtg ttcattggaga gtgtctctct 180
 cctgccccca aggccacgga atcttctatt ccttctttgt acccaaaggg caaagtggag 240
 gccagggtct ctttgctaag gagctaagta ggggaaagag gcagggggag ctcccagcag 300
 gaccaaaggg agaccaaggt ttggacccca gaacagagca ggaaccaga gtctgtgca 360
 gtcacaggat gacgcaggga ggacggctgt tggatgctt ttctagggtt tctccattac 420
 tggctcttcg gatg 434

<210> 50
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 50
 gttttagcgc ccactttact gccaatagct gacattgccc tgggttaggg gagaataaat 60
 aaaatctgtg gcatcagaca ggtattaccg aggcgaagag tggactgggc tttcgtgggc 120
 acttaccctg ggaagggggt atgaggtggc tggagaagtg ttcattggaga gtgtctctct 180
 cctgccccca aggccacgga atcttctatt ccttctttgt acccaaaggg caaagtggag 240
 gccagggtct ctttgctaag gagctaagta ggggaaagag gcagggggag ctcccagcag 300
 gaccaaaggg agaccaaggt ttggacccca gaacagagca ggaaccaga gtctgtgca 360
 gtcacaggat gacgcaggga ggacggctgt tggatgctt ttctagggtt tctccattac 420
 tggctcttcg gatg 434

<210> 51
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 51
 tcagacctca ttgaggccat ccgaagagcc aataatggag aaaccctaga aaagatcacc 60
 aacagccgtc ctccctgcgt catcctgtga ctgcacagga ctctgggttc ctgctctgtt 120
 ctgggggtcc aaccttggtc tccctttggt cctgctggga gctccccctg cctctttccc 180
 ctacttagct ccttagcaaa gagaccctgg cctccacttt gccctttggt acaaagaagg 240
 aatagaagat tccgtggcct tgggggcagg agagagacac tctccatgaa cacttctcca 300
 gccacctcat acccccttcc cagggttaagt gccacgaaa gccagtcga ctcttcgcct 360
 cggtataacc tgtctgatgc cacagatttt atttattctc cctaaccag ggcaatgtca 420
 gctattggca gtaaatggc gctacaaaca ctaaaaaa 459

<210> 52
 <211> 451
 <212> DNA
 <213> Homo sapiens

<400> 52
 tttttttttt ttagtggttg tagcgccact ttactgcaa tagctgacat tgccctgggt 60
 taggggagaa taaataaaat ctgtggcatc agacaggtat taccgaggcg aagagtggac 120
 tgggctttcg tgggcactta ccttggaag ggggtatgag gtggctggag aagtgttcat 180
 ggagagtgtc tctctctgc cccaaggcc acggaatctt ctattcctc ttgtaccca 240
 aaggggcaaa gtggaggcca gggctctctt gctaaggagc taagtagggg aaagaggcag 300
 ggggagctcc cagcaggacc aaaggagac caaggtttgg accccagAAC agagcaggaa 360
 cccagagtcc tgtgcagtca caggatgacg cagggaggac ggctgttggt gatcttttct 420
 agggtttctc cattactggc tcttcggatg g 451

<210> 53
 <211> 447
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature
<222> (244)..(245)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (378)..(378)
<223> n is any nucleotide of a, t, g or c

<400> 53
t t t t t a g t g t t t g t a g c g c c a c t t t t a c t g c c a a t a g c t g a c a t t g c c c t g g g t t a g g g g a 60
g a a t a a a t a a a a t c t g t g g c a t c a g a c a g g t a t t a c c g a g g c a a g a g t g a c t g g g c t t 120
t c g t g g g c a c t t a c c c t g g g a g g g g g t a t g a g g t g g c t g g a g a a g t g t c a t g g a g a g t 180
g t c t c t c t c c t g c c c c a a g g c a c g g a a t c t t c t a t t c c t t c t t t g t a c c c a a g g c a a 240
a g t n n a g g c c a g g g t c t c t t c t a a g g a g c t a a g t a g g g a a a g a g g c a g g g g a g c t c 300
c c a g c a g g a c c a a a g g g a g a c a a g g t t t g a c c c c a g a a c a g a g c a g g a a c c a g a g t c 360
c t g t g c a g t c a c a g g a t n a c g a g g g a g a c g g c t g t t g t g a t c t t t t c t a g g g t t t c t 420
c c a t t a c t g g c t c t t c g g a t g g c t c a 447

<210> 54
<211> 473
<212> DNA
<213> Homo sapiens

<400> 54
t a g t g t t t g t a g c g c c a c t t t a c t g c c a a t a g c t g a c a t t g c c c t g g g t t a g g g g a g a a t 60
a a a t a a a a t c t g t g g c a t c a g a c a g g t a t t a c c g a g g c g a a g a g t g g a c t g g g c t t t c g t 120
g g g c a c t t a c c c t g g g a a g g g g g t a t g a g g t g g a g a g t g t t c a t g g a g a g t g t c t 180
c a c t c e t g c c c c c a a g g c c a c g g a a t c t t c t a t t c c t t c t t t g t a c c c a a a g g c a a a g t g 240
g a g g c c a g g g t c t c t t t t g c t a a g g a g c t a a g t a g g g g a a a g a g g c a g g g g a g a c t c c c a g 300
c a g g a c c a a a g g g a g a c c a a g g t t t g g g a c c c a g a a c a g a g c a g g a a c c a g a g t c c t g 360
t t g c a g t c a c a g g a t g a c g a g g a g g a c g c t g t t g g t g a t c t t t t c t t a g g g t t t c t 420
c a t t a c t t g c t c t t t c g g a t g g c c t c a a t a g a t c t t t t c t c a t a g g g g a a a t 473

<210> 55
<211> 454
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (373)..(373)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (445)..(445)
<223> n is any nucleotide of a, t, g or c

<400> 55
t a g t g t t t g t a g c g c c a c t t t a c t g c c a a t a g c t g a c a t t g c c c t g g g t t a g g g g a g a a t 60
a a a t a a a a t c t g t g g c a t c a g a c a g g t a t t a c c g a g g c g a a g a g t g g a c t g g g c t t t c g t 120
g g g c a c t t a c c c t g g g a a g g g g g t a t g a g g t g g a g a g t g t t c a t g g a g a g t g t c t 180
c t c t c e t g c c c c c a a g g c c a c g g a a t c t t c t a t t c c t t c t t t g t a c c c a a a g g c a a a g t 240
g g a g g c c a g g t c t c t t t t g c t a a g g a g c t a a g t a g g g g a a a g a g g c a g g g g a g a c t c c c a 300
g c a g g a c c a a a g g g a g a c c a a g g t t t g g a c c c a g a a c a g a g c a g g a a c c a g a g t c c t g 360
t g c a g t c a c a g g n t t g a c c g a g g g a g g a c c g g c t g t t g g t g a t c c t t t t c t a g g g t t t c 420
t c c a t t a c t g g c t c t t c c g g a t g g n c t c a a t g a g 454

<210> 56
<211> 394
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (390)..(390)
<223> n is any nucleotide of a, t, g or c

<400> 56
tgacattgcc ctgggttagg ggagaataaa taaaatctgt ggcacagac aggtattacc 60
gaggcgaaga gtggactggg ctttcgtggg cacttaccct gggaaggggg tatgaggtgg 120
ctggagaagt gttcatggag agtgtctctc tctgcccc aaggccacgg aatcttctat 180
tccttctttg tacccaaagg gcaaatgga gccagggtc tctttgctaa ggagctaagt 240
aggggaaaga ggcaggggga gctcccagca ggaccaaagg gagaccaagg tttggacccc 300
agaacagagc aggaaccagc agtcctgtgc agtcacagga tgacgcaggg aggcaggctg 360
ttggtgatct tttctagggt tccccattn actg 394

<210> 57
<211> 427
<212> DNA
<213> Homo sapiens

<400> 57
tttttttttt gttttagcgc ccactttact gccaatagct gacattgccc tgggttaggg 60
gagaataaat aaaatctgtg gcatcagaca ggtattaccg aggcgaagag tggactgggc 120
tttcgtgggc acttaccctg ggaagggggg atgaggtggc tggagaagtg ttcattggaga 180
gtgtctctct cctgccccca aggccacgga atcttctatt ccttctttgt acccaaaggg 240
caaatgtggag gccagggtct ctttgctaag gagctaagta ggggaaagag gcagggggag 300
ctcccagcag gaccaaaggg agaccaaggt ttgtacocca gaacagagca ggaacccaga 360
gtcctgtgca gtcacaggat gacgcaggga ggcaggctgt tgggtgatct tttctagggt 420
tctccat 427

<210> 58
<211> 421
<212> DNA
<213> Homo sapiens

<400> 58
tttttagtgt ttgtagcgcc actttactgc caatagctga cattgccctg ggttagggga 60
gaataaataa aatctgtggc atcagacagg tattaccgag gcgaagagtg gactgggctt 120
tcgtgggcac ttaccctggg aaggggggat gaagtggctg gagaagtgtt catggagagt 180
gtctctctcc tgcccccaag gccacggaat cttctattcc ttctttgtac ccaaagggca 240
aagtggaggc caggggtctc ttgctaagga gctaagttag ggaaagaggc agggggagct 300
cccagcagga ccaaagggag accaagggtt ggacccagca acagagcagg aaccagagt 360
cctgtgcagt cacaggatga cgcaggaggg acggctgttg gtgatctttt ctagggtttc 420
t 421

<210> 59
<211> 419
<212> DNA
<213> Homo sapiens

<400> 59
tttttttagt gttttagcgc ccactttact gccaatagct gacattgccc tgggttaggg 60
gagaataaat aaaatctgtg gcatcagaca ggtattaccg aggcgaagag tggactgggc 120
tttcgtgggc acttaccctg ggaagggggg atgaggtggc tggagaagtg ttcattggaga 180
gtgtctctct cctgccccca aggccacgga atcttctatt ccttctttgt acccaaaggg 240

caaagtggag gccaggggtct ctttgctaag gagctaagta ggggaaagag gcagggggag 300
ctcccagcag gaccaaaggg agaccaaggt ttggacccca gaacagagca ggaaccacaga 360
gtcctgtgca gtcacaggat gacgcaggga ggacggctgt tggatgattt ttctaggg 419

<210> 60
<211> 434
<212> DNA
<213> Homo sapiens

<400> 60
tgttttagtc gccactttac tgccaatagc tgacattgcc ctgggttagg ggagaataaa 60
taaaatctgt ggcacagac aggtattacc gaggcgaaga gtggactggg ctttcgtggg 120
cacttaccct ggggaagggg tatgaggtgg ctggagaagt gttcatggag agtgtctctc 180
tcctgcccc aaggccacgg aatcttctat tccttctttg taccacaaagg gcaaagtgga 240
ggccagggtc tctttgctaa ggagctaagt agggggaaaag aggcaggggg agctccagc 300
aggaccaaag ggagaccaag gtttggaccc cagaacagag caggaaccca gagtctctgt 360
cagtcacagg attgacgcag ggaggaccgg ctgttggtga tcttttctaa gggtttctcc 420
attactgggc tctt 434

<210> 61
<211> 418
<212> DNA
<213> Homo sapiens

<400> 61
agcattagt tttgtagcgc cactttaactg ccaatagctg acattgccct gggttagggg 60
agaataaata aaatctgtgg catcagacag gtattaccga ggcaagagt ggactgggct 120
ttcgtgggca cttaccctgg gaagggggta tgaggtggct ggagaagtgt tcatggagag 180
tgtctctctc ctgcccccaa ggccacggaa tcttctattc cttctttgta cccaaagggg 240
caaagtggag gccaggggtc ctttgctaag gagctaagta ggggaaagag gcagggggag 300
ctcccagcag gaccaaaggg agaccaaggt ttggacccca gaacagagca ggaaccacaga 360
gtcctgtgca gtcacaggat gacgcaggga ggacggctgt tggatgattt ttctaggg 418

<210> 62
<211> 403
<212> DNA
<213> Homo sapiens

<400> 62
tagtgtttgt agcgccactt tactgccaat agctgacatt gccctgggtt aggggagaat 60
aaataaaatc tgtggcatca gacaggtatt accgagggca agagtggact gggctttcgt 120
gggcacttac cctgggaagg gggatgagg tggctggaga agtggtcatg gagagtgtct 180
ctctcctgcc cccaaggcca cggaatcttc tattccttct ttgtacccaa agggcaaaagt 240
ggaggccagg gtctctttgc taaggagcta agtaggggaa agaggcaggg ggagctccca 300
gcaggaccaa agggagacca aggtttggac ccagaacag agcaggaacc cagagtctctg 360
tgcagtcaca ggatgacgca gggaggacgg ctgttggtga tct 403

<210> 63
<211> 401
<212> DNA
<213> Homo sapiens

<400> 63
gtttgtagcg ccactttact gccaatagct gacattgccc tgggttaggg gagaataaat 60
aaaatctgtg gcatcagaca ggtattaccg aggcgaagag tggactgggc tttcgtgggc 120
acttaccctg ggaagggggg atgaggtggc tggagaagtg ttcattgaga gtgtctctct 180
cctgccccca aggcacaggg atcttctatt cttcttttgt acccaaaggg caaagtggag 240
gccaggggtc ctttgctaag gagctaagta ggggaaagag gcagggggag ctcccagcag 300

gaccaaaggg agaccaaggt ttggacccca gaacagagca ggaacccaga gtccctgtgca 360
gtcacaggat gacgcaggag gacggctgtt ggtgatcttt t 401

<210> 64
<211> 432
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (123)..(123)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (124)..(124)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (349)..(349)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (399)..(399)
<223> n is any nucleotide of a, t, g or c

<400> 64
actgccaaata gctgacattg cctctgggtta ggggagaata aataaaatct gtggcatcag 60
acaggtatta ccgaggcgaa ggtggactg ggctttcgtg ggcacttacc ctgggaaggg 120
ggnnatgagg tggctggaga agtgttcatt gagagtgtct ctctcctgcc cccaaggcca 180
cggaatcttc tattccttct ttgtacccaa agggcaaagt ggaggccagg gtctctttgc 240
taaggagcta agtaggggaa agaggcaggg ggagctccca gcaggaccaa agggagacca 300
aggtttggac cccaggaaca ggcaggaac ccagagtcct gtggcagtc acaggatgga 360
cgcagggagg gacggctgtt cggtaactt ttctagggnt tccccatta accggctctt 420
cggatggcct ct 432

<210> 65
<211> 501
<212> DNA
<213> Homo sapiens

<400> 65
ttagtgtttg tagcgccact ttactgcca tagctgacat tgccctgggt taggggagaa 60
taaataaaat ctgtggcatc agacaggtat taccgaggcg aagagtggac tgggctttcg 120
tgggcactta ccttggaag ggggtatgag gtggctggag aagtgttcat ggagagtgtc 180
tctctcctgc cccaaggcc acggaatctt ctattacttc ttgtaccca aagggcaaaag 240
tggaggccag ggtctctttg ctaaggagct aagttagggga aagaggcagg gggagctccc 300
agcaggacca aaggagacc aaggtttga cccagaaaca gacaggaac ccagagtcct 360
gtgcaatcac aggatgacgc agggaggacg gcttttggg atcttttcta gggtttctcc 420
attactggct cttcggatgg cctcaatgag atcttttcta tagggaaagc cccatttctc 480
cagcttggag aacaccagct 501

<210> 66
<211> 792
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (2)..(2)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (21)..(21)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (73)..(73)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (106)..(106)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (116)..(117)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (232)..(232)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (246)..(246)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (263)..(263)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (295)..(295)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (304)..(304)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (311)..(311)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (321)..(321)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature

272
C1

A1

<222> (325)..(325)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (332)..(332)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (343)..(343)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (345)..(345)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (371)..(371)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (379)..(379)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (421)..(421)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (430)..(430)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (438)..(438)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (451)..(451)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (461)..(461)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (486)..(486)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (488)..(488)
<223> n is any nucleotide of a, t, g or c

<210> 30
<211> 386
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (13)..(13)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (53)..(53)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (378)..(378)
<223> n is any nucleotide of a, t, g or c

30
gcggggagcg ggngcagacg tccgtagcgc cccctcccga ggaggtcgag ccnggcagtg 60
gggtccgcat cgtggtggag tactgtgaac cctgcggctt cgaggcgacc tacctggagc 120
tggccagtgc tgtgaaggag cagtatccgg gcacgcagat cgagtcgcgc ctccggggca 180
caggtgcttt gagatagaga taaatggaca gctggtgttc tccaagctgg agaattgggg 240
ctttccctat gagaaagatc ttcattgagg ccacccgaag agccagtaat gggagaaacc 300
cttagaaaag attcaccaac agccgttcct cctggcgctt cattccttgt tgaattgcac 360
agggattttg gggtttcttg ttttgt 386

<210> 31
<211> 348
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (226)..(226)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (315)..(315)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (336)..(336)
<223> n is any nucleotide of a, t, g or c

31
gcgcacgtg gtggagtact gtgaaccctg cggcttcgag gcgaacctacc tggagctggc 60
cagtgtctgt aaggagcagt atccgggcat cgagatcgag tcgcgcctcg ggggcacagg 120
tgctttgaga tagagataaa tggacagctg gtgttctcca agctggagaa tgggggcttt 180
ccctatgaga aagatctcat tggaggccatc cgaagagcca gtaatngaga aaccctagaa 240
aagatcacca acagccgtcc tcccttgctg catcctgtga ctgcacaggg attctggggt 300
ccttgttctg ttctnggggt tcaaaccttt ggggttcctt ttggtcct 348

<210> 32
<211> 344
<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (27)..(28)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (56)..(57)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (110)..(110)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (157)..(157)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (215)..(215)

<223> n is any nucleotide of a, t, g or c

<220>

<221> misc_feature

<222> (305)..(305)

<223> n is any nucleotide of a, t, g or c

<400> 32

cccagagcga gcggccgga tgagcgnnga gccggggcag acgtccgtag cgcccnntcc 60
cgaggaggtc gagccgggca gtgggtccg catcgtgtg gagtactgt aacctgctg 120
cttcgaggcg acctacctg agctggccag tgctgtnaag gaggcagtat cgggcatcga 180
gatcgagtcg cgcctcgggg gcacaggtgc ctttnagata gagataaatg gacagctggt 240
gttctccaag ctggagaatg gggggcttcc cctatgagaa agatctcatt gagggccatcc 300
gaagngccag taaatggaga aaccctagaa aagatcacca acag 344

<210> 33

<211> 532

<212> DNA

<213> Homo sapiens

<400> 33

tttagtggtt gtagegccac ttactgccac atagctgaca ttgcoctggg ttaggggaga 60
ataaataaaa tctgtggcat cagacaggta ttacaggagc gaagagtga ctggccttcc 120
gtgggcactt acctgggaa gggggtatga ggtggctgga gaagtgtca tggagagtgt 180
ctctctcttg cccccaaggc cagcgaatct ttattcctt cttgtacc aaaggcaaaa 240
gtggaggcca ggtctcttt gctaaggagc taagttaggg aaagaggcag ggggagctcc 300
cagcaggacc aaaggagac caaggtttgg acccagaaac agagcaggaa cccagagtcc 360
tgtgcagtca caggatgacg cagggaggac ggtgttggg gatctttct agggtttctc 420
cattactggc tcttcggatg gctcaatga gatctttctc atagggaaag ccccatctct 480
ccagcttggg gaacaccagc tgtccattta tctctatctc aaaggcacct gt 532

<210> 34

<211> 309

<212> DNA

<213> Homo sapiens

<220>
<221> misc_feature
<222> (496)..(497)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (516)..(516)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (524)..(524)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (527)..(527)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (538)..(538)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (548)..(548)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (551)..(551)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (564)..(564)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (567)..(567)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (571)..(571)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (573)..(573)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (581)..(581)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature

2m
C1

A1

<222> (586)..(587)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (594)..(594)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (603)..(603)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (608)..(608)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (617)..(617)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (620)..(620)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (624)..(624)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (632)..(632)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (635)..(636)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (643)..(643)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (645)..(645)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (647)..(648)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (654)..(654)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (668)..(668)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (672)..(672)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (679)..(680)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (687)..(687)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (692)..(692)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (696)..(696)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (699)..(699)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (702)..(702)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (708)..(708)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (711)..(711)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (716)..(717)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (719)..(719)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature

<222> (723)..(723)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (726)..(726)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (728)..(728)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (734)..(734)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (737)..(737)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (746)..(746)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (749)..(749)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (752)..(752)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (761)..(761)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (770)..(771)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (775)..(775)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (777)..(777)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (789)..(789)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (792)..(792)
<223> n is any nucleotide of a, t, g or c

<400> 66
cnggctgagg aattcggacg ngggcagtag tgtgaaggag cagtatccgg gcatcgagat 60
cgagtcgcgc ctngggggca cagggtgcttt gagatagaga taaatngaca gctgggnnttc 120
tccaagctgg agaattgggg ctttccctat gagaaagatc tcattgaggc catccgaaga 180
gccagtaatg gagaaacct agaaaagatc accaacagcc gtccctccctg cntcatcctg 240
tgactncaca ggactctggg ttncctgctct gttctggggg ccaaaccttg gtctnctttt 300
ggtncctgctt nggagctccc nctgncnttt tncctactt agntnctttn gcaaagagga 360
cccttggcct ncacttttanc ccttttgggg tacaaaagga aggggaattag gaagatttcc 420
nttggcnttn gaggggcnaa ggaagatgag ncaattttcc nattaaacaa ctttttcaag 480
caaactnaa taccnntttt ccccaggggt aaggtncccc acgnaanagc ccaagtcnac 540
atTTTTtngc nttgggaaat accntanttt nantccaaaa nttttntttt aatntttccc 600
canaaccnaa gggaaanttn aagnaatttg gnaannaaag ttngngnntc aaancacaag 660
ataaaaaana anaaaaaann tttgagnggg gncccnganc cnaatttngc ncantnngng 720
ggnggntnaa aaancanatt tgcagnggnt tnaaaacagt ntgagctttn naaancntgg 780
gtttccaana an 792

<210> 67
<211> 474
<212> DNA
<213> Homo sapiens

<400> 67
tttttttttt tgtttgtagc gccactttac tgccaatagc tgacattgcc ctggggttagg 60
ggagaataaa taaaatctgt ggcacacagc aggtattacc gaggcgaaga gtggactggg 120
ctttcgtggg cacttaccct gggaaggggg tatgaggtgg ctggagaagt gttcatggag 180
agtgtctctc tcttgcctcc aaggccacgg aatcttctat tctttctttg taccctaaag 240
gcaaagtggg ggccagggtc tctttgctaa ggagctaagt aggggaaaga ggcaggggga 300
gctcccagca ggaccaaagg gagaccaagg tttggacccc agaacagagc aggaacccag 360
agtccctgtg agtcacagga tgacgcaggg aggcaggctg ttggtgatct tttctagggt 420
ttctccatta ctggctcttc ggatggcctc aatgagatct ttctcatagg gaaa 474

<210> 68
<211> 483
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (248)..(248)
<223> n is any nucleotide of a, t, g or c

<400> 68
agtgtttgta ggcacacttt actgccaata gctgacattg ccctgggtta ggggagaata 60
aataaaatct gtggcatcag acaggtatta ccgagccgaa gagtggactg ggctttcgtg 120
ggcacttacc ctgggaaggg ggtatgaggt ggctggagaa gtgttcatgg agagtgtctc 180
tctcctgccc ccaaggccac ggaatcttct attccttctt tgtacccaaa gggcaaagtg 240
gaggccangg tctcttttgc taaggagcaa ataagggaag gaggcagggg gagctcccag 300
caagaccaa gggagaccaa ggtttggacc ccagaacaga gcaggaaacc agagtccctg 360
gcagtcacag gatgacgcag ggaggacggc tgttggtgat cttttctagg gtttctccat 420
tactggctct tccgatggcc tcaatgagat ctttctcata gggaaagccc ccattctcca 480
gct 483

<210> 69
<211> 449

<212> DNA
<213> Homo sapiens

<400> 69
tttttagtggt tgtagcgcca ctttactgcc aatagctgac attgccctgg gttaggggag 60
aataaataaa atctgtggca tcagacaggt attaccgagg cgaagagtgg actgggcttt 120
cgtgggcact taccctggga aggggggtatg aggtggctgg agaagtgttc atggagagtg 180
tctctctcct gcccccaagg ccacggaatc ttctatttct tttttgtacc caaagggcaa 240
agtggaggcc aggtctctct tgctaaggag ctaagtaggg gaaagaggca gggggagctc 300
ccagcaggac caaagggaag ccaagggttg gacccagaa cagagcagga acccagagtc 360
ctgtgcagtc acaggatgac gcagggagga cggctgttgg tgatcttttc taggggtttct 420
ccattactgg ctcttcggat ggccctcaat 449

<210> 70
<211> 594
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (385)..(385)
<223> n is any nucleotide of a, t, g or c

<400> 70
tagtgtttgt agcgccaact tactgccaat agctgacatt gccctgggtt aggggagaat 60
aaataaaatc tgtggcatca gacaggtatt accgaggcga agagtggact gggctttcgt 120
gggcacttac cctgggaagg gggtatgagg tggctggaga agtgttcatg gagagtgtct 180
ctctcctgcc cccaaggcca cggaatcttc tttctcttct ttgtacccaa agggcaaagt 240
ggaggccagg gtctctttgc taaggagcta agtaggggaa agaggcaggg ggagctccca 300
gcaggaccaaa agggaaccac ggtttggacc ccagaacaga gcaggaccca gagtctcttg 360
cagtcacagg atgacgcagg gaggcnggctg tgggtgatct ttctaggggt ttctccatta 420
ctggctcttc cgatgcctca ctgagatctt tctcataggg aaagccccc tctctcagct 480
ttgagacgca agctgtcatt tatctctatc tcaaggcacc ctgtgcccc gaggcgaatt 540
catctcgagc cccgatactg ctcttccaca gactggcagt tcaaggaagt cgcc 594

<210> 71
<211> 389
<212> DNA
<213> Homo sapiens

<400> 71
tttttagtggt ttgtagcgcc actttactgc caatagctga cattgccctg ggttagggga 60
gaataaataa aatctgtggc atcagacagg tattaccgag gcgaagagtg gactgggctt 120
tcgtgggcac ttaccctggg aaggggggtat gaggtggctg gagaagtgtt catggagagt 180
gtctctctcc tgcccccaag gccacggaat ctctatttcc ttctttgtac ccaaaggcca 240
aagtggaggc cagggtctct ttgctaaggc gctaagtagg ggaaagaggc agggggagct 300
cccagcagga ccaaaggga accaagggtt ggacccagaa acagagcagg aaccagagt 360
cctgtgcagt cacaggatga cgcaggga 389

<210> 72
<211> 405
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (334)..(334)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (361)..(361)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (374)..(374)
<223> n is any nucleotide of a, t, g or c

<400> 72
agtgtttgta ggcgcacttt actgccaata gctgacattg ccctgggtta ggggagaata 60
aataaaatct gtggcatcag acaggtatta ccgaggcgaa gagtggactg ggctttcgtg 120
ggcacttacc ctgggaaggc ggtatgaggt ggctggagaa gtgttcattg agagtgtctc 180
tctcctgccc ccaaggccac ggaatcttct attccttctt tgtaccctaa gggcaaagtg 240
gaggccaggc tctctttgct aaggagctaa gtaggggaaa gaggcagggg gagctcccag 300
caggaccaaa gggagaccaa ggtttggacc ccanaacaga gcaggaacct agagtctctg 360
ncagtcacag gatnacgcag ggaggacggc tgttggtgat ctttt 405

<210> 73
<211> 396
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (233)..(233)
<223> n is any nucleotide of a, t, g or c

<400> 73
tttttttttt gtttgtagcg ccactttact gccaatagct gacattgccc tgggttaggg 60
gagaataaat aaaatctgtg gcacacagaca ggtattaccg aggcgaagag tggactgggc 120
tttgtgggc acttaccctg ggaaggggt atgaggtggc tggagaagtg ttcattggaga 180
gtgtctctct cctgccccca aggccacgga atcttctatt ctttctttgt acnccaaagg 240
gcaaagtgga ggccagggtc tctttgctaa ggagctaagt aggggaaaga ggcaggggga 300
gctcccagca ggaccaaagg gagaccaagg tttggacccc agaacagagc aggaacccag 360
agtctgtgtc agtcacagga cgacgcaggg aggacg 396

<210> 74
<211> 392
<212> DNA
<213> Homo sapiens

<400> 74
tttttagtgt ttgtagcgcc actttactgc caatagctga cattgccttg ggtagggga 60
gaataaataa aatctgtggc atcagacagg tattaccgag gcgaagagt gactgggctt 120
tcgtgggcac ttaccctggg aagggggtat gaggtggctg gagaagtgt catggagagt 180
gtctctctcc tgcccccaag gccacggaaat cttctattcc ttctttgtac ccaaagggca 240
aagtggaggc cagggtctct ttgctaagga gctaagtagg ggaaagaggc agggggagct 300
cccagcagga ccaaaggga accaaagttt ggacccaga acagagcatg aaccagagt 360
cctgtgcagt cacaggatga cgcaggagg ac 392

<210> 75
<211> 372
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> (362)...(362)
<223> n is any nucleotide of a, t, g or c

<400> 75
ctgccaatag ctgacattgc cctggggttag gggagaataa ataaaatctg tggcatcaga 60
caggtattac cgaggcgaag agtggactgg gctttcgtgg gcacttacct tgggaagggg 120
gtatgaggtg gctggagaag tgttcattga gagtgtctct ctctgcccc caaggccacg 180
gaatcttcta ttccttcttt gtacccaaag gcaaagtga ggccagggtc tctttgctaa 240
ggagctaagt aggggaaaga ggcaggggga gctcccagca ggaccaaagg gagaccaagg 300
tttgaccgcc agaacagagc aggaacccag agtcctgtgc agtcacagga tgacgcaggg 360
angaccggct tt 372

<210> 76
<211> 380
<212> DNA
<213> Homo sapiens

<400> 76
ttttagtgtt tgtagcgcca ctttactgcc aatagctgac attgccctgg gttaggggag 60
aataaataaa atctgtggca tcagacaggt attaccgagg cgaagagtgg actgggcttt 120
cgtgggcact taccctggga agggggtatg aggtggctgg agaagtgttc atggagagtg 180
tctctctcct gccccaagg ccacgggaatc ttctattcct tctttgtacc caaagggcaa 240
agtggaggcc aggggtctct tgctaaggag ctaagtaggg gaaagaggca gggggagctc 300
ccagcaggac caaagggaga ccaagggttg gacccagaa cagagcagga acccagagtc 360
ctgtgcagtc acaggatgac 380

<210> 77
<211> 374
<212> DNA
<213> Homo sapiens

<400> 77
gtttgtagcg ccactttact gccaatagct gacattgccc tgggttaggg gagaataaat 60
aaaatctgtg gcatcagaca ggtattaccg aggcgaagag tggactgggc tttcgtgggc 120
acttaccctg ggaagggtgt atgaggtggc tggagaagtg ttcatggaga gtgtctctct 180
cctgccccca aggccacgga acttctatt ccttctttgt acccaaaggc caaagtggag 240
gccagggtct ctttgctaag gacctaagta ggggaaagag gcagggggag ctcccagcag 300
gaccaaaggg agaccaaggc ttggacccca gaacagagca ggaaccacga gtctgtgca 360
gtcacaggat gacg 374

<210> 78
<211> 386
<212> DNA
<213> Homo sapiens

<400> 78
tttttttttt tttttttttt agtgtttgta ggcgcacttt actgccaata gctgacattg 60
ccctgggtta ggggagaata aataaaatct gtggcatcag acaggtatta ccgaggcgaa 120
gagtggactg ggctttcgtg ggcacttacc ctgggaaggg ggtatgaggt ggctggagaa 180
gtgttcattg agagtgtctc tctctgccc ccaaggccac ggaatcttct attccttctt 240
tgtacccaaa gggcaaagtc gaggccaggg tctctttgct aaggagctaa gtaggggaaa 300
gaggcagggg gagctcccag caggacccaa gggagaccaa ggtttggacc ccagaacaga 360
gcaggaaccc agagtctgtg gcagtc 386

<210> 79
<211> 451
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (427)..(427)
<223> n is any nucleotide of a, t, g or c

<400> 79
tgttttagtc gccactttac tgccaatagc tgacattgcc ctgggttagg ggagaataaa 60
taaaatctgt ggcattagac aggtattacc gaggcgaaga gtggactggg ctttcgtggg 120
cacttaccct gggaaggggg tatgaggtgg ctggagaagt gttcatggag agtgtctctc 180
tcctgcccc aaggccacgg aatcttctat tccttctttg tacccaaagg caaagtggag 240
gccagggtct ctttgctaag gagctaagta ggggaaagag gcagggggat ctccagcag 300
gaccaaagg agaccaagg ttggacccca gaacagagca aggaaccag agtcctgtgc 360
agtcacagga ttgacgaggg gaggaccggc ttgtttggtg atcctttcct agggtttctc 420
ccattanttg gctctttccg attggcctca a 451

<210> 80
<211> 311
<212> DNA
<213> Homo sapiens

<400> 80
ataaataaaa tctgtggcat cagacaggta ttaccgaggc gaagagtgga ctgggctttc 60
gtgggcactt accctgggaa gggggtatga ggtggctgga gaagtgttca tggagagtgt 120
ctctctctct ccccaaggc cacggaatct tctattcctt ctttgtacct aaagggcaaa 180
gtggaggcca ggggtctctt gctaaggagc taagtagggg aaagaggcag ggggagctcc 240
cagcaggacc aaagggagac caaggtttgg accccagaac atagcaggaa ccagagtctc 300
gtgcagtcac a 311

<210> 81
<211> 412
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (126)..(126)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (349)..(349)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (390)..(390)
<223> n is any nucleotide of a, t, g or c

<400> 81
cactttactg ccaatagctg acattgccct gggttagggg agaataaata aaatctgtgg 60
catcagacag gtattaccga ggcgaagagt ggaactgggt ttcgtgggca cttaccctgg 120
gaaggnggtt atgaggtggc tggagaagtg ttcattggaga gtgtctctct cctgccccca 180
aggcacggaa tcttctattc cttctttgta cccaaagggc aaagtggagg ccagggtctc 240
tttgctaagg agctaagtag gggaaagagg cagggggagc tcccagcagg accaaaggga 300
gaccaaggtt tgggacccca gaacagagca ggaaccaga ctctgttnc agttcacagg 360
atgacggcag gggaggagcg gcttttggtt atctttttt agggttttt cc 412

<210> 82
<211> 372

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (73)..(73)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (210)..(210)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (219)..(219)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (306)..(306)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (322)..(322)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (327)..(327)
<223> n is any nucleotide of a, t, g or c

<220>
<221> misc_feature
<222> (365)..(365)
<223> n is any nucleotide of a, t, g or c

<400> 82
actgccaata gctgacattg ccttgggtta ggggagaata aataaaatct gtggcatcag 60
acaggtatta ccnaggcgaa gactggactg ggctttcgtg ggcacttacc ctgggaaggg 120
ggtatgaggt ggctggagaa gttttcatgg agagtgtctc tctcctgtcc ccaaggccac 180
ggaatcttct attccttctt tgtacccaan gggcaaagng gaggccaggg tctctttgct 240
aaggagctaa gtaggggaaa gaggcagggg gagctcccag caggaccaaa gggggaccaa 300
ggtttnggac ccagaacag ancaggnacc cagagtctct tgcagtcaca gggatgacgc 360
aggnggacg gc 372

<210> 83
<211> 401
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (328)..(328)
<223> n is any nucleotide of a, t, g or c

<400> 83
tttttttttt tttttttttt ttttttttag ggtttgtagc gccactttac tgccaatagc 60
tgacattgcc ctggggttag ggagaataaa taaaatctgg ggcacaaac aggttttacc 120
gaggcgaaaa gtggactggg ttttcgtgg cacttaccct ggaaggggg tatgaggggg 180

ctggaaaagt gttcatggag agtgtctctc tcttgccccc aaggccacgg aatcttttat 240
 tccttctttg taccctaaag gcaaaagtga ggccagggtc tttttgctaa ggagctaaat 300
 aggggaaaga ggcaggggga gctcccanca ggaccaaagg gagaccaagg tttggacccc 360
 aaaacaaagc aggaacccaa agtcctgtgc agtcacagga t 401

<210> 84
 <211> 733
 <212> DNA
 <213> Homo sapiens

<400> 84
 gggatccgga gccc aaatct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60
 aattcgaggg tgcaccgtca gtcttctctt tcccccaaa acccaaggac accctcatga 120
 tctcccgagc tcttgaggtc acatgcgtgg tgggtgacgt aagccacgaa gaccctgagg 180
 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
 ggctgaatgg caaggagtac aagtgcgaagg tctccaacaa agccctccca acccccatcg 360
 agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
 catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctgggc aaaggcttct 480
 atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
 ccacgcctcc cgtgctggac tccgacggct ccttcttctt ctacagcaag ctcaccgtgg 600
 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
 acaaccacta cagcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
 gactctagag gat 733

<210> 85
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 85
 Ser Thr Glu Pro Gly Gln Thr Ser Val
 1 5

<210> 86
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 86
 Ser Thr Glu Pro Gly Gln Ile Ser Tyr
 1 5

<210> 87
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 87

Gly Thr Glu Pro Ser Arg Leu Gly Tyr
1 5

<210> 88

<211> 9

<212> PRT

<213> Homo sapiens

<400> 88

Phe Leu Ile Glu Ile Asn Trp Tyr Leu
1 5

<210> 89

<211> 10

<212> PRT

<213> Homo sapiens

<400> 89

Phe Leu Tyr Glu Lys Asp Leu Ile Glu Ala
1 5 10

<210> 90

<211> 10

<212> PRT

<213> Homo sapiens

<400> 90

Phe Leu Tyr Glu Lys Asp Leu Ile Glu Val
1 5 10

<210> 91

<211> 9

<212> PRT

<213> Homo sapiens

<400> 91

Gly Val Phe Pro Tyr Glu Lys Asp Leu
1 5

<210> 92

<211> 10

<212> PRT

<213> Homo sapiens

<400> 92

Cys Val Glu Phe Ala Thr Tyr Leu Glu Leu
1 5 10

<210> 93

<211> 10

<212> PRT

<213> Homo sapiens

<400> 93

Phe Val Tyr Glu Lys Asp Leu Ile Glu Ala
1 5 10

<210> 94

<211> 9

<212> PRT

<213> Homo sapiens

<400> 94

Gln Tyr Pro Gly Ile Glu Ile Glu Leu
1 5

<210> 95

<211> 10

<212> PRT

<213> Homo sapiens

<400> 95

Ile Tyr Gly Gln Leu Val Phe Ser Lys Leu
1 5 10

<210> 96

2nd
C1

A

<211> 9

<212> PRT

<213> Homo sapiens

<400> 96

Lys Leu Glu Asn Gly Gly Phe Pro Lys
1 5

<210> 97

<211> 9

<212> PRT

<213> Homo sapiens

<400> 97

Ile Leu Gly Gln Leu Val Phe Ser Lys
1 5

<210> 98

<211> 10

<212> PRT

<213> Homo sapiens

<400> 98

Leu Leu Asn Gly Gly Phe Pro Tyr Glu Lys
1 5 10

<210> 99

<211> 9

<212> PRT

<213> Homo sapiens

<400> 99

Ile Val Gly Gln Leu Val Phe Ser Lys
1 5

<210> 100

<211> 10

202
C1

A1

<212> PRT

<213> Homo sapiens

<400> 100

Leu Val Asn Gly Gly Phe Pro Tyr Glu Lys
1 5 10

<210> 101

<211> 9

<212> PRT

<213> Homo sapiens

<400> 101

Lys Ile Leu Ile Glu Ala Ile Arg Arg
1 5

<210> 102

<211> 9

<212> PRT

<213> Homo sapiens

<400> 102

Tyr Val Gly Ile Glu Ile Glu Ser Arg
1 5

<210> 103

<211> 9

<212> PRT

<213> Homo sapiens

<400> 103

Glu Val Val Glu Pro Gly Ser Gly Arg
1 5

<210> 104

<211> 9

<212> PRT

gm
cl
AL

<213> Homo sapiens

<400> 104

Ser Arg Leu Gly Gly Thr Gly Ala Leu
1 5

<210> 105

<211> 10

<212> PRT

<213> Homo sapiens

<400> 105

Glu Arg Ile Thr Asn Ser Arg Pro Pro Leu
1 5 10

<210> 106

<211> 9

<212> PRT

<213> Homo sapiens

<400> 106

Glu Glu Val Glu Pro Gly Ser Gly Leu
1 5

<210> 107

<211> 10

<212> PRT

<213> Homo sapiens

<400> 107

Ile Glu Ile Glu Ser Arg Leu Gly Gly Leu
1 5 10

<210> 108

<211> 9

<212> PRT

<213> Homo sapiens

3m
C1
A1

<400> 108

Val Glu Pro Gly Ser Gly Val Arg Leu
1 5

<210> 109

<211> 10

<212> PRT

<213> Homo sapiens

<400> 109

Phe Glu Ile Glu Ile Asn Gly Gln Leu Leu
1 5 10

<210> 110

<211> 9

<212> PRT

<213> Homo sapiens

<400> 110

Phe Glu Ala Thr Tyr Leu Glu Leu Val
1 5

<210> 111

<211> 10

<212> PRT

<213> Homo sapiens

<400> 111

Lys Glu Leu Ile Glu Ala Ile Arg Arg Val
1 5 10

<210> 112

<211> 9

<212> PRT

<213> Homo sapiens

<400> 112

Glu Gln Cys Gly Phe Glu Ala Thr Tyr
1 5

<210> 113

<211> 10

<212> PRT

<213> Homo sapiens

<400> 113

Glu Gln Arg Leu Gly Gly Thr Gly Ala Phe
1 5 10

<210> 114

<211> 10

<212> PRT

<213> Homo sapiens

<400> 114

Gly Gln Gly Val Arg Ile Val Val Glu Tyr
1 5 10

<210> 115

<211> 9

<212> PRT

<213> Homo sapiens

<400> 115

Asn Pro Arg Pro Pro Cys Val Ile Leu
1 5

<210> 116

<211> 10

<212> PRT

<213> Homo sapiens

<400> 116

Glu Pro Gly Ser Gly Val Arg Ile Val Leu
1 5 10

<210> 117

<211> 9

<212> PRT

<213> Homo sapiens

<400> 117

Glu Thr Leu Glu Lys Ile Thr Asn Leu
1 5

<210> 118

<211> 8

<212> PRT

<213> Homo sapiens

<400> 118

Glu Ala Ile Arg Arg Ala Ser Leu
1 5

<210> 119

<211> 10

<212> PRT

<213> Homo sapiens

<400> 119

Ile Ala Arg Ala Ser Asn Gly Glu Thr Leu
1 5 10

<210> 120

<211> 9

<212> PRT

<213> Homo sapiens

<400> 120

Arg Arg Ala Ser Asn Gly Glu Thr Phe
1 5

<210> 121

<211> 10

<212> PRT

<213> Homo sapiens

<400> 121

Val Arg Ile Val Val Glu Tyr Cys Glu Tyr
1 5 10

<210> 122

<211> 9

<212> PRT

<213> Homo sapiens

<400> 122

Ile Arg Arg Ala Ser Asn Gly Glu Leu
1 5

<210> 123

<211> 10

<212> PRT

<213> Homo sapiens

<400> 123

Arg Arg Ala Ser Asn Gly Glu Thr Leu Leu
1 5 10

<210> 124

<211> 9

<212> PRT

<213> Homo sapiens

<400> 124

Phe Pro Lys Leu Glu Asn Gly Gly Met
1 5

<210> 125

<211> 10

<212> PRT

<213> Homo sapiens

<400> 125

Phe Pro Tyr Glu Lys Asp Leu Ile Glu Met
1 5 10

<210> 126

<211> 9

<212> PRT

<213> Homo sapiens

<400> 126

Phe Asp Ile Glu Ile Asn Gly Gln Leu
1 5

<210> 127

<211> 10

<212> PRT

<213> Homo sapiens

<400> 127

Phe Asp Ile Glu Ile Asn Gly Gln Leu Ile
1 5 10

<210> 128

<211> 9

<212> PRT

<213> Homo sapiens

<400> 128

Gly His Glu Ala Thr Tyr Leu Glu Leu
1 5

<210> 129

<211> 10

<212> PRT

2m
C1

A1

<213> Homo sapiens

<400> 129

Ala His Glu Ile Glu Ile Asn Gly Gln Leu
1 5 10

<210> 130

<211> 9

<212> PRT

<213> Homo sapiens

<400> 130

Arg His Ala Ser Asn Gly Glu Thr Leu
1 5

<210> 131

<211> 10

<212> PRT

<213> Homo sapiens

<400> 131

Cys His Phe Glu Ala Thr Tyr Leu Glu Leu
1 5 10

<210> 132

<211> 9

<212> PRT

<213> Homo sapiens

<400> 132

Asn Lys Gln Leu Val Phe Ser Lys Leu
1 5

<210> 133

<211> 9

<212> PRT

<213> Homo sapiens

Handwritten notes: "DMS" and "A" with a checkmark.

<400> 133

Ile Glu Ile Asn Gly Gln Leu Val Tyr
1 5

<210> 134

<211> 10

<212> PRT

<213> Homo sapiens

<400> 134

Ile Glu Ile Glu Ser Arg Leu Gly Gly Tyr
1 5 10

<210> 135

<211> 9

<212> PRT

<213> Homo sapiens

<400> 135

Leu Pro Gly Thr Gly Ala Phe Glu Ile
1 5

<210> 136

<211> 10

<212> PRT

<213> Homo sapiens

<400> 136

Ser Pro Val Lys Glu Gln Tyr Pro Gly Ile
1 5 10

<210> 137

<211> 9

<212> PRT

<213> Homo sapiens

<400> 137

Gly Pro Phe Pro Tyr Glu Lys Asp Ile
1 5

<210> 138

<211> 10

<212> PRT

<213> Homo sapiens

<400> 138

Ser Pro Val Lys Glu Gln Tyr Pro Gly Ile
1 5 10

<210> 139

<211> 9

<212> PRT

<213> Homo sapiens

<400> 139

Leu Ala Phe Thr Gly Ala Phe Glu Ile
1 5

<210> 140

<211> 10

<212> PRT

<213> Homo sapiens

<400> 140

Glu Ala Gly Ser Gly Val Arg Ile Val Val
1 5 10

<210> 141

<211> 9

<212> PRT

<213> Homo sapiens

<400> 141

Leu Gln Ile Asn Gly Gln Leu Val Ile
1 5

<210> 142

<211> 10

<212> PRT

<213> Homo sapiens

<400> 142

Val Gln Pro Gly Ser Gly Val Arg Ile Val
1 5 10

<210> 143

<211> 9

<212> PRT

<213> Homo sapiens

<400> 143

Phe Ser Lys Leu Glu Asn Gly Gly Trp
1 5

<210> 144

<211> 10

<212> PRT

<213> Homo sapiens

<400> 144

Gly Ser Gly Val Arg Ile Val Val Glu Trp
1 5 10

<210> 145

<211> 10

<212> PRT

<213> Homo sapiens

<400> 145

Ser Ala Val Lys Glu Gln Tyr Pro Gly Leu
1 5 10

<210> 146

202
01

A

<211> 9

<212> PRT

<213> Homo sapiens

<400> 146

Glu Phe Cys Gly Phe Glu Ala Thr Leu
1 5

<210> 147

<211> 10

<212> PRT

<213> Homo sapiens

<400> 147

Val Phe Ser Lys Leu Glu Asn Gly Gly Leu
1 5 10